

Traffic Improvements and Rapid Transit

TRAFFIC SIGNAL MAINTENANCE AND TRAFFIC CONTROL COMPUTER

<u>Subtasks</u>	<u>Priority</u>	<u>Estimated Useful Life of Improvement</u>	<u>Project Manager</u>
Traffic Signal Maintenance	Essential	10 - 15 years	T&ES
Traffic Control Computer	Essential	10 - 15 years	T&ES

Project Summary: This project provides for the maintenance and upgrade of the City's traffic control facilities in order to ensure traffic safety and to optimize traffic flow in the City. It also provides for the signalization of intersections that are currently passively controlled with stop or yield signs. In addition, this project provides for the replacement and upgrade of existing traffic control facilities, including the central traffic computer.

Traffic Control Facilities: The annual budget for the installation, replacement and/or upgrade of traffic signal equipment will be used to replace or improve equipment at intersections that require a high level of maintenance. A total of \$850,000 per year (FY 2007-FY 2012) has been budgeted to further enhance pedestrian safety and replace or upgrade the existing traffic signal infrastructure. Of the total \$850,000, \$480,000 is for fixed equipment and \$370,000 is for signs and signals and includes the following: \$250,000 per year for the installation of new traffic signals; \$100,000 per year for the installation of illuminated way-finding signs; \$50,000 per year for the installation of multi-sensory signals for pedestrians with vision or hearing impairments; \$50,000 per year for the installation of LED signal indicators; \$250,000 per year for the upgrading of existing traffic signals including the replacement of mast arms; \$50,000 per year for new pedestrian signals; and \$100,000 for monitoring and recording traffic volume information. \$180,000 over three years (\$90,000 in unallocated prior year monies and \$45,000 per year (FY 2007-FY 2008)) has been budgeted to replace existing school flashers with new flashers and provide a central control system for their operation. In addition, \$732,000 in unallocated prior year monies remain budgeted to provide signal optimization on Duke Street that will keep pedestrians and vehicles moving through this corridor; and \$193,000 in unallocated prior year monies remain for signal optimization in the west end of the City that will focus on traffic patterns. Both of these projects are 100 percent grant funded (RSTP grant funds for Duke Street and federal Congestion Mitigation and Air Quality (CMAQ) monies for west end signal optimization) with no City share.

Traffic Control Computer: The Virginia Department of Transportation (VDOT) has placed a high priority on the need to upgrade traffic signal systems throughout Northern Virginia. The upgrades will provide greater reliability and flexibility for better management of traffic flow, both in peak and off-peak periods, and will contribute toward improving regional air quality. The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) established special federal funding for programs that mitigate traffic congestion and improve air quality in non-attainment areas in the United States. Since the Washington metropolitan area is listed as a "serious" non-attainment area for ozone, these special federal funds are available to jurisdictions in the region. These funds are administered by the Commonwealth. The U.S. Secretary of Transportation has identified traffic signal upgrading as an eligible project for funding. \$2.0 million in prior year unallocated monies will be used to replace the traffic computer and traffic signal system, of which \$1.5 million is federally funded. This project will consist of two phases. Phase I was the installation of the new traffic computer and traffic computer room upgrades, which is complete. Phase II is the interconnecting of intersections with traffic signals throughout the City to the new traffic computer and upgrading the existing twisted pair communications cable with fiber optic cable. An additional

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\$1.5 million in prior year unallocated federal Congestion Mitigation and Air Quality (CMAQ) funds remain to complete Phase II and begin Phase III, which will make the signal system more traffic responsive. Phase III will include completing the installation of the fiber optic communications cable and the installation of video detection surveillance equipment.

\$750,000 has been budgeted from FY 2009 to FY 2012 to upgrade the new central computer hardware and software to incorporate advances in technology and expand the system capability. These upgrades will be funded with federal Congestion Mitigation and Air Quality (CMAQ) monies.

Change In Project From Prior Fiscal Years:

- Annual funding, in the amount of \$850,000 per year has been extended to FY 2012; and
- \$750,000 budgeted to upgrade the new central computer hardware and software has been extended to FY 2012. These upgrades are projected be funded with federal Congestion Mitigation and Air Quality (CMAQ) monies.

TRAFFIC SIGNAL MAINTENANCE AND TRAFFIC CONTROL COMPUTER

TASK TITLE	UNALLOCATED PRIOR-FY	FY 2007 CURRENT	FY 2008 FY + 1	FY 2009 FY + 2	FY 2010 FY + 3	FY 2011 FY + 4	FY 2012 FY + 5	TOTAL
TRAFFIC CONTROL COMPUTER	3,500,000	0	0	750,000	750,000	750,000	750,000	6,500,000
SIGNAL OPTIMIZATION	193,000	0	0	0	0	0	0	193,000
SCHOOL FLASHERS	90,000	45,000	45,000	0	0	0	0	180,000
DUKE STREET TRAFFIC SIGNALS	732,000	0	0	0	0	0	0	732,000
FIXED EQUIPMENT REPLACEMENT	670,000	480,000	480,000	480,000	480,000	480,000	480,000	3,550,000
SIGNS/SIGNALS	780,000	370,000	370,000	370,000	370,000	370,000	370,000	3,000,000
TOTAL PROJECT	5,965,000	895,000	895,000	1,600,000	1,600,000	1,600,000	1,600,000	14,155,000
LESS REVENUES	3,925,000	0	0	750,000	750,000	750,000	750,000	6,925,000
NET CITY SHARE	2,040,000	895,000	895,000	850,000	850,000	850,000	850,000	7,230,000

ALEXANDRIA TRANSIT CORPORATION (ATC) BUSES

<u>Subtasks</u>	<u>Priority</u>	<u>Estimated Useful Life of Improvement</u>	<u>Project Manager</u>
Bus Replacement	Essential	10 years	T&ES
Bus Shelters	Essential	20 years	T&ES
ADA Accessible Ramps and Loading Platforms	Essential	20 years	T&ES

Project Summary: This project provides for the addition and replacement of buses to the DASH fleet, for capital maintenance needs at the DASH facility, and for the installation of bus shelters throughout the City. Previously funds were provided for the acquisition of land for a new DASH facility. (Please refer to the operating budget document section on "Transit Subsidies" for additional information on funding for transit operating expenses.)

Bus Replacement: The DASH bus system was implemented in 1984 as a supplement to Metrobus service operating in the City. The original four DASH routes were operated with a fleet of 19 buses. In FY 1990, nine new buses were purchased to provide new DASH bus routes to improve bus connections in the Eisenhower Valley and to the Van Dorn Metrorail station. Additional buses have been purchased since FY 1992, bringing the total DASH fleet as of the end of FY 2005, to 59 buses. This project provides for the phased replacement of older buses so that new buses are available as vehicles reach their average useful life of approximately 12 years.

The 2007 DASH Transit Development Program (TDP) includes the following scheduled replacements of buses by model year and fiscal year:

Bus Model Year	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	Total
1996	4	4	2				10
1998			3	5	2		10
1999					3	2	5
2000						4	4
Total Buses	4	4	5	5	5	6	29

The City's FY 2006 - 2011 Approved CIP included \$1,285,000 in fiscal years 2006 - 2008; and \$1,607,000 in fiscal years 2009 through 2011. The FY 2007 - 2012 Proposed CIP includes the following changes to reflect an increase in the cost of one bus from \$321,250 each to \$334,750 each, including related equipment and the extension of funding for 6 buses to be purchased in FY 2012.

FY 2007 - Increases \$54,000, from \$1,285,000 to \$1,339,000;
FY 2008 - Increases \$54,000, from \$1,285,000 to \$1,339,000;
FY 2009 - Increases \$66,750, from \$1,607,000 to \$1,673,750;
FY 2010 - Increases \$66,750, from \$1,607,000 to \$1,673,750;
FY 2011 - Increases \$66,750, from \$1,607,000 to \$1,673,750;
FY 2012- \$2,008,500 is added.

ALEXANDRIA TRANSIT CORPORATION (ATC) BUSES

DASH Land Acquisition/Facility: In FY 2000, City Council initially authorized staff to pursue the acquisition of a site for a new DASH facility to meet current and future system expansion needs. This was reaffirmed by City Council on January 22, 2002. A total of \$5.0 million in State funding was budgeted for DASH for land acquisition. The land was acquired in FY 2002. The estimated cost to construct a new DASH facility (without an enclosed bus storage area) is approximately \$22.8 million. A total of \$23.3 million in unallocated prior year monies remain in this CIP for the construction of the new facility, which is offset by approved VDOT monies. Funds are not reflected at this time for construction of a covered shelter for parked DASH buses as State funds currently allocated are not sufficient for that portion of the project. However, it is expected that a financing plan will be worked out with VDOT so that the full scope of this facility project can be funded. The estimated total cost for the construction of a new DASH facility with an enclosed bus storage area is approximately \$35.0 million. Additional VDOT monies to enclose the bus parking area have been requested to be reprogrammed from other projects to fully fund the construction of this facility. The planned 61,000 square foot DASH bus facility will include the functions of DASH Transportation and Administration; Bus Maintenance; service and inspection lanes; a possible bus storage facility and a shared parking deck for DASH, T&ES maintenance and off-hour public use.

Bus Shelters: \$90,000 per year through FY 2010 is budgeted for the replacement of existing bus shelters at various locations throughout the City, and the construction of new bus shelters when new shelter sites are identified and approved by the City. T&ES will also be seeking federal funds to rebuild and replace some of the existing Metrobus shelters in the City.

ADA Accessible Ramps and Loading Platforms: \$10,000 per year through FY 2010 is budgeted to provide funding to improve access for persons with disabilities at bus stops throughout the City. Monies will be used for the installation of passenger loading platforms at bus stop locations, or to modify sidewalks and access ramps at or near bus stop locations. These improvements will bring the bus stop locations up to Americans with Disabilities Act (ADA) guidelines and provide better access to and from bus stops along the public right-of-way. Most of these improvements are for locations along pedestrian pathways that lead to and from a number of public facilities as well as bus stops. The absence of access ramps and sidewalks along bus stop routes makes pedestrian travel for persons who use wheelchairs and other mobility aids difficult and dangerous. It becomes increasingly difficult for elderly persons who have diminished ranges of mobility to negotiate curbs at street intersections without access ramps. Also, the absence of passenger boarding platforms at bus stops makes boarding and alighting from buses difficult and dangerous for persons who use wheelchairs and other mobility aids.

Change In Project From Prior Years:

- Annual funding for bus shelters, in the amount of \$90,000, has been extended to FY 2010;
- Annual funding for ADA accessible ramps and loading platforms, in the amount of \$10,000 per year, has been extended to FY 2010; and
- A total of \$9.7 million has been budgeted over six years for the replacement of a total of 29 buses over this period. These buses will be funded by \$5.2 million in State Urban Funds. Additional funding, in the amount of \$4.5 million, from City, State or federal sources will be needed to fully fund this DASH bus procurement program.

ALEXANDRIA TRANSIT CORPORATION (ATC) BUSES

TASK TITLE	UNALLOCATED PRIOR-FY	FY 2007 CURRENT	FY 2008 FY + 1	FY 2009 FY + 2	FY 2010 FY + 3	FY 2011 FY + 4	FY2012 FY + 5	TOTAL
BUSES	2,546,780	1,339,000	1,339,000	1,673,750	1,673,750	1,673,750	2,008,500	12,254,530
BUS FACILITY	23,323,000	0	0	0	0	0	0	23,323,000
BUS SHELTERS	60,000	90,000	90,000	90,000	90,000	0	0	420,000
ADA ACCESSIBLE RAMPS AND LOADING PLATFORMS	40,000	10,000	10,000	10,000	10,000	0	0	80,000
TOTAL PROJECT	25,969,780	1,439,000	1,439,000	1,773,750	1,773,750	1,673,750	2,008,500	36,077,530
LESS REVENUES	25,869,780	969,100	0	1,673,750	469,250	1,673,750	375,250	31,030,880
NET CITY SHARE	100,000	469,900	1,439,000	100,000	1,304,500	0	1,633,250	5,046,650

BUS & RAIL CAPITAL REPLACEMENT/IMPROVEMENT (WMATA CAPITAL)

<u>Subtasks</u>	<u>Priority</u>	<u>Estimated Useful Life of Improvement</u>	<u>Project Manager</u>
Capital Contribution	Essential	Not applicable	T&ES

The Washington Metropolitan Area Transit Authority (WMATA) Board of Directors approved "Metro Matters" and "Beyond Metro Matters" Capital Improvement Program (CIP) which identified \$1.1 billion in urgent capital needs of the region's bus and rail transit system over the next six years.

Alexandria's share of the total combined "Metro Matters" and "Beyond Metro Matters" programs total \$49.1 million between FY 2007 and FY 2012. State Urban Funds will no longer be used to fund the City's share of the WMATA capital program as those funds contain federal funds which the WMATA "Metro Matters" program cannot accept. An additional \$11.0 million, from State sources will be needed to fully fund the City's share of WMATA "Metro Matters" and "Beyond Metro Matters" beginning in FY 2008.

The WMATA CIP consists of two broad categories - the Metro Matters Program and the Beyond Metro Matters Program. The Metro Matters Program was initiated in FY 2005 by the jurisdictional funding partnership established by the Metro Matters Funding Agreement. This program provides funding for the infrastructure Renewal Program (IRP), and for a group of high-priority transit projects, including Rail Cars and Facilities, Buses and Facilities, and Security Program. The Beyond Metro Matters Program includes funding for the Infrastructure Renewal Program-II (IRP-II) projects beyond the period of the Metro Matters Funding Agreement, for other IRP-II projects not incorporated into the Metro Matters Funding Agreement, and for the System Access/Capacity (SAP) and System Expansion Programs (SEP).

1. Infrastructure Renewal Program (IRP) is the rehabilitation, replacement, and preventative maintenance of bus and rail infrastructure including fleet vehicles, facilities, track and tunnels, and information technology. The IRP is funded primarily by the federal government. Subsidies from local governments are the second largest source of funding.
2. Rail Car Program will improve Metrorail performance by adding eight-car trains to some of the most overcrowded Metrorail lines, and will also support further ridership growth.
3. Bus Program is aimed at relieving overcrowding and supporting future bus ridership growth.
4. Security Program which is assumed to be fully federally funded as a homeland security initiative, is aimed at improving Metro's capacity to operate in an emergency, as well as to prevent emergencies through the implementation of protective measures.

BUS & RAIL CAPITAL REPLACEMENT/IMPROVEMENT (WMATA CAPITAL)

City Funding Plan

- The City's overall share of the WMATA six-year CIP, including "Metro Matters" and "Beyond Metro Matters" is \$49.1 million.
- \$11.0 million starting in FY 2008 in State funding sources will need to be identified and secured.

TASK TITLE	UNALLOCATED PRIOR-FY	FY 2007 CURRENT	FY 2008 FY + 1	FY 2009 FY + 2	FY 2010 FY + 3	FY 2011 FY + 4	FY 2012 FY + 5	TOTAL
BUS/RAIL CAPITAL	0	6,415,000	7,441,000	8,057,000	8,915,000	9,047,000	9,181,000	49,056,000
TOTAL PROJECT	0	6,415,000	7,441,000	8,057,000	8,915,000	9,047,000	9,181,000	49,056,000
LESS REVENUES	0	0	2,300,000	2,300,000	2,400,000	2,000,000	2,000,000	11,000,000
NET CITY SHARE	0	6,415,000	5,141,000	5,757,000	6,515,000	7,047,000	7,181,000	38,056,000

SAFETEA-LU TRANSPORTATION PROJECTS

<u>Subtasks</u>	<u>Priority</u>	<u>Estimated Useful Life of Improvement</u>	<u>Project Manager</u>
Federal Transportation Programs	Essential	Not applicable	T&ES

On August 10, 2005, the President of the United States signed the Safe, Accountable, Flexible, and Efficient Transportation Equity Act - A Legacy for Users (SAFETEA-LU) providing for \$286.4 billion in guaranteed funding for federal surface transportation programs over six years through FY 2009, including \$52.6 billion for federal transit programs. Of that total \$567 million was earmarked for transportation projects in the Commonwealth of Virginia, with \$11.1 million earmarked for the City of Alexandria.

In December 2005, Governor Warner proposed \$625 million in General Fund support for transportation projects and programs over the next two years, which included over \$142 million to provide the 20 percent match for all earmarked projects in the recently passed federal transportation bill. That \$142 million included \$11.1 million to fully fund the SAFETEA-LU projects to be undertaken in the City of Alexandria over the next four years (FY 2006 - FY 2009). These projects include:

1. Royal Street Bus Garage I and II (\$4,272,500): for the future relocation of the WMATA bus garage located on the block bound by Royal, Wythe, Pendleton and Pitt Streets.
2. Eisenhower Valley Metro Area I and II: (\$3,862,000): for Eisenhower Valley transit improvements, including building a north entrance and an extended platform at the Eisenhower Metro station, as well as bus shelters, bus bays and crosswalks in order to make development in the area as transit-oriented as possible. Additionally, a study may be undertaken to analyze the potential for transit service between the east and west portions of the service corridor.
3. City-wide Transit (\$1,250,000): for City-wide transit improvements, including the replacement of WMATA bus shelters; additional bus shelters and for amenities such as real-time bus information displays, solar power lighting, and transit information accessible to people with vision impairments.
4. Potomac Yard Transit (\$1,250,000): for transit improvements for Potomac Yard as part of the seven-year transit plan for this rapidly developing residential and commercial area, including proposed bus rapid transit.
5. Mill Road Slip Ramp (\$500,000): for the design of an access ramp to Interstate 95 at Mill Road to alleviate recurring congestion at the Telegraph Road and Interstate 95 interchange. This project is critical to the region as a means of easing traffic congestion and provides for safe emergency evacuation.

SAFETEA-LU TRANSPORTATION PROJECTS

TASK TITLE	UNALLOCATED PRIOR-FY	FY 2007 CURRENT	FY 2008 FY + 1	FY 2009 FY + 2	FY 2010 FY + 3	FY 2011 FY + 4	FY 2012 FY + 5	TOTAL
SAFETEA-LU PROJECTS	0	5,475,950	2,755,850	2,902,700	0	0	0	11,134,500
TOTAL PROJECT	0	5,475,950	2,755,850	2,902,700	0	0	0	11,134,500
LESS REVENUES	0	5,475,950	2,755,850	2,902,700	0	0	0	11,134,500
NET CITY SHARE	0	0	0	0	0	0	0	0